

### **REMARKS/DISCUSSION OF ISSUES**

By this Amendment, Applicant cancels claims 4, 15, 22-23, 26, 28 and 30 without disclaimer of the underlying subject matter or prejudice against subsequent prosecution. Applicant also amends claims 1-3, 5, 8-11, 13-14, 16-21, 24-25, 27, 29, 31, and 33-39, and add new claims 40-45. Accordingly, claims 1-3, 5-14, 16-21, 24-25, 27, 29, 31 and 33-45 are pending in the application.

Reexamination and reconsideration are respectfully requested in view of the following Remarks.

#### **35 U.S.C. § 112**

The Office Action rejects claims 28-31, 33, 36 and 38 under 35 U.S.C. § 112 because of various minor errors in the claims.

By this Amendment, Applicant cancels claims 28 and 30 without disclaimer of the underlying subject matter or prejudice against subsequent prosecution, so the rejections thereof are moot. Applicant also amends claims 29, 31, 33, 36 and 38 and respectfully submit that the minor errors have all been corrected.

Accordingly, Applicant respectfully requests that the rejections under 35 U.S.C. § 112 be withdrawn.

#### **35 U.S.C. §§ 102 & 103**

The Office Action rejects claims 1-3, 5-8, 10-14, 16-18 and 24-25 under 35 U.S.C. § 102 over Schafer et al. U.S. Patent 5,113,085 ("Schaffer"), and claims 9, 27, 29 and 34 under 35 U.S.C. § 102 over Schafer.

Applicant respectfully submits that claims 1-3, 5-14, 16-18, 24-25, 27, 29 and 34 are all patentable over Schafer for at least the following reasons.

##### **Claim 1**

Among other things, the method of claim 1 includes determining an orientation of the gas discharge lamp, wherein at least one of the duty cycle (D) and the current ratio (R) are adjusted based upon the determined orientation of the gas discharge lamp.

Applicant respectfully submits that Schafer does not disclose any method including this combination of features.

Therefore, for at least these reasons, Applicant respectfully submits that claim 1 is patentable over Schafer. Accordingly, Applicant respectfully requests that the rejection of claim 1 be withdrawn and that claim 1 be allowed at this time.

Claims 2-3 and 5-10

Claims 2-3 and 5-10 depend from claim 1 and are deemed to be patentable over Schafer for at least the reasons set forth above with respect to claim 1. Accordingly, Applicant respectfully requests that the rejections of claims 2-3 and 5-10 be withdrawn and that claims 2-3 and 5-10 be allowed at this time.

Claim 11

Among other things, in the method of claim 11 at least one of the duty cycle (D) and the current ratio (R) are set based upon the orientation of the gas discharge lamp so as to maintain a desired particle distribution inside the gas discharge lamp.

Applicant respectfully submits that Schafer does not disclose any method including this feature.

Therefore, for at least these reasons, Applicant respectfully submits that claim 11 is patentable over Schafer. Accordingly, Applicant respectfully requests that the rejection of claim 11 be withdrawn and that claim 11 be allowed at this time.

Claims 12-14 and 16-18

Claims 12-14 and 16-18 depend from claim 11 and are deemed to be patentable over Schafer for at least the reasons set forth above with respect to claim 11. Accordingly, Applicant respectfully requests that the rejections of claims 12-14 and 16-18 be withdrawn and that claims 12-14 and 16-18 be allowed at this time.

Claim 24

Among other things, in the device of claim 24, at least one of the duty cycle (D) and the current ratio (R) are adjusted based upon a control signal indicating an orientation of the gas discharge lamp.

Applicant respectfully submits that Schafer does not disclose any device including this feature.

Therefore, for at least these reasons, Applicant respectfully submits that claim 24 is patentable over Schafer. Accordingly, Applicant respectfully requests that the rejection of claim 24 be withdrawn and that claim 24 be allowed at this time.

Claims 25, 27, 29 and 34

Claims 25, 27, 29 and 34 depend from claim 24 and are deemed to be patentable over Schafer for at least the reasons set forth above with respect to claim 24. Accordingly, Applicant respectfully requests that the rejections of claims 25, 27, 29 and 34 be withdrawn and that claims 25, 27, 29 and 34 be allowed at this time.

**NEW CLAIMS 40-45**

New claims 40-45 depend variously from claims 1, 11 and 24 and are deemed patentable over Schafer for at least the reasons set forth above with respect to claims 1, 11 and 24, and also for the various features recited therein.

**CONCLUSION**

In view of the foregoing explanations, Applicant respectfully requests that the Examiner reconsider and reexamine the present application, allow claims 1-3, 5-14, 16-21, 24-25, 27, 29, 31 and 33-45 and pass the application to issue. In the event that there are any outstanding matters remaining in the present application, the Examiner is invited to contact Kenneth D. Springer (Reg. No. 39,843) at (571) 283.0720 to discuss these matters.

Respectfully submitted,

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